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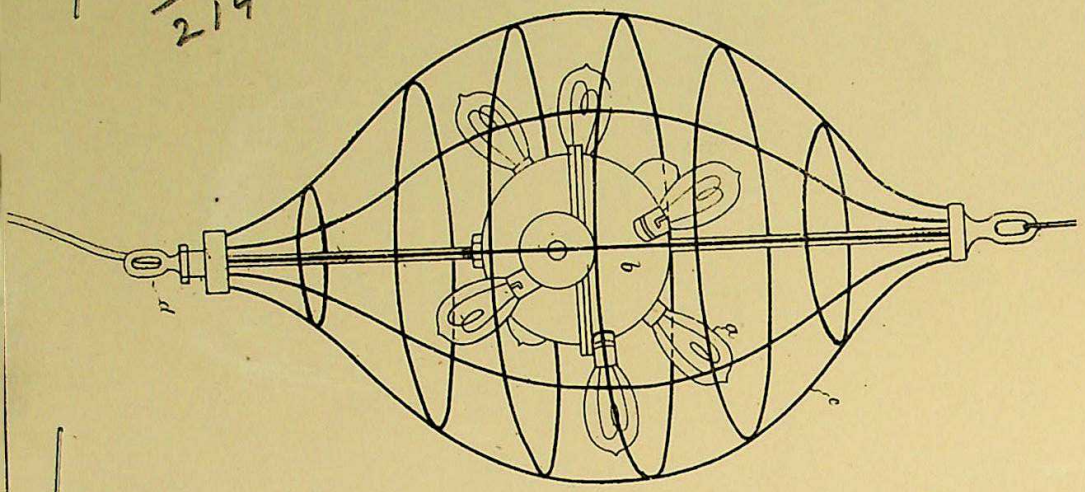

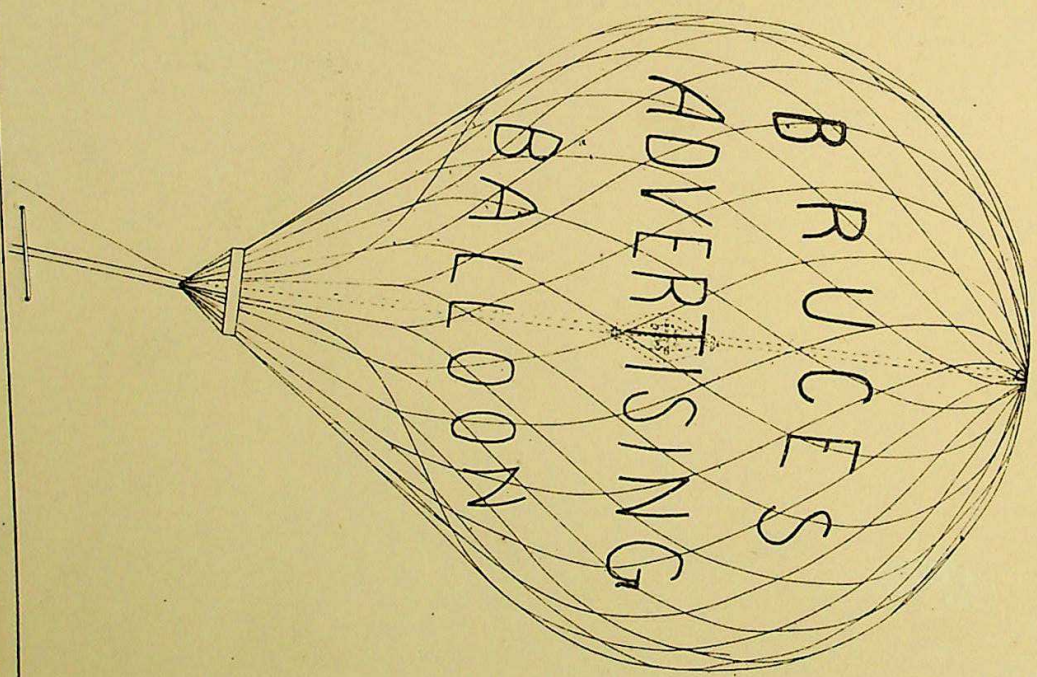

London: Printed by Eyre and Spottiswoode.
Printers to the Queen's most Excellent Majesty. 1886
Malby & Sons, Photo-Litho.

A.D. 1885, 29th SEPTEMBER. N° 11,602.

PROVISIONAL SPECIFICATION.

Improvements in Apparatus for Advertising by Night over Large Areas.

I ERIC STUART BRUCE of Exeter College in University of Oxford Gentleman, do hereby declare the nature of my said invention for "IMPROVEMENTS IN APPARATUS FOR ADVERTISING BY NIGHT OVER LARGE AREAS" to be as follows:—

My invention consists of a combination of a balloon made of translucent or semi-translucent material & one or more electric incandescent lamps placed within the balloon which is filled with hydrogen or other suitable gas, a metallic circuit which may or may not be combined with the rope by which the balloon would generally be held captive, a battery primary or secondary or any other suitable source of electricity which latter would generally be placed on the ground or roof of building & would supply the electric current to light the lamp or lamps within the balloon.

The object of the apparatus is to display at night any advertisement which may be designed on the translucent Balloon at such a height that the word or design may be visible over a large area.

The Translucent Balloon can also be used to attract attention to any building such as theatre etc without any special design being depicted on the balloon.

By placing a contact breaker in the circuit intermittent flashes of light may be produced at will. This make & break can be produced if desirable by clock work.

The Balloon itself can be made of any shape & can itself be made to resemble any article to advertised.

If needed lamps of various colours can be placed within the balloon & by means of a switch the current may be turned on to any lamp or group of lamps in turn the effect being that the whole balloon would change colour the object of these changes being to attract more notice.

If desired the electric lamps need not be placed only inside the balloon but may be used to illuminate any object suspended from the balloon.

The balloon may when wished be worked as a free balloon the battery or other source of electricity being placed in the car.

Dated this 29th day of September 1885.

ERIC STUART BRUCE.

[Price 8d.]

COMPLETE SPECIFICATION.

Improvements in Apparatus for Advertising by Night over Large Areas.

I ERIC STUART BRUCE of Exeter College in University of Oxford, Gentleman do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

My invention consists of a combination of a balloon made of translucent or semi-translucent material & one or more electric incandescent lamps placed within the balloon which is filled with hydrogen or other suitable gas, a metallic circuit which may or may not be combined with the rope by which the balloon would generally be held captive, a battery primary or secondary or any other suitable source of electricity which latter would generally be placed on the ground or roof of building & would supply the electric current to light the lamp or lamps within the balloon. The object of the apparatus is to display at night any advertisement which may be designed on the translucent Balloon at such a height that the word or design may be visible over a large area. The Translucent Balloon can also be used to attract attention to any building such as theatre etc. without any special design being depicted on the balloon. By placing a contact breaker in the circuit intermittent flashes of light may be produced at will. This make & break can be produced if desirable by clock work. The balloon itself can be made of any shape & can itself be made to resemble any article to be advertised. If needed lamps of various colours can be placed within the balloon & by means of a switch the current may be turned on to any lamp or group of lamps in turn the effect being that the whole balloon would change colour the object of these changes being to attract more notice If desired the electric lamps need not be placed only inside the balloon but may be used to illuminate any object suspended from the balloon. The balloon may when wished be worked as a free balloon the battery or other source of electricity being placed in the car.

The Invention is illustrated in the accompanying drawings wherein fig. 1 shows the mode of suspending the lamps within the balloon which is held captive by a rope and fig. 2 shows the lamps upon their supporting frame separately.

The number of lamps I use inside the balloon depends upon the size of the balloon used They may be supported on any suitable frame or holder suspended within the balloon by the arrangement described in my complete specification for Improvements in apparatus for Heliographic signalling by electricity, patent, No 5854, 1885. The form of support for the lamps I prefer is shown in fig. 2 where the lamps *a*. project at various angles from a ball *b* & are enclosed for protection from breaking in a spherical frame work *c* made of brass or other suitable material. The lamps are usually connected in multiple arc & the main leads to which they are connected are led through the eye *d* at the bottom of the frame *c* whence they pass down through the neck of the balloon to the source of power below. For producing the intermittent flashes of light the same apparatus may be used as described in my patent No 5854. 1885 before referred to.

The main leads are made as light & flexible as possible consistently with the current they are required to convey.

Having now particularly described & ascertained the nature of my said invention, & in what manner the same is to be performed, I declare that what I claim is

The herein described apparatus for advertising by night over large areas, consisting in the combination with a balloon of one or more electric incandescent lamps placed within the balloon, an electric connection with a battery & other source of electricity as & for the purpose hereinbefore specified.

Dated this 26th day of June 1886.

ERIC STUART BRUCE.

LONDON: Printed by EYRE AND SPOTTISWOODE,
Printers to the Queen's most Excellent Majesty.
For Her Majesty's Stationery Office.

1886.